Psychosocial aspects of abortion

A review of issues and needed research

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The literature on psychosocial aspects of abortion is confusing. Individual publications must be interpreted in the context of cultural, religious, and legal constraints obtaining in a particular society at a given time, with due attention to the status and availability of alternatives to abortion that might be chosen by a woman with an " unwanted " pregnancy. A review of the literature shows that, where careful pre- and post-abortion assessments are made, the evidence is that psychological benefit commonly results, and serious adverse emotional sequelae are rare. The outcome of refused abortion seems less satisfactory, with regrets and distress frequently occurring. Research on the administration of abortion services suggests that counselling is often of value, that distress is frequently caused by delays in deciding upon and in carrying out abortions, and by unsympathetic attitudes of service providers. The phenomenon of repeated abortion seeking should be seen in the context of the availability and cost of contraception and sterilization. The place of sterilization with abortion requires careful study. A recommendation is made for observational descriptive research on populations of women with potentially unwanted pregnancies in different cultures, with comparisons of management systems and an evaluation of their impact on service users.

Our purpose in this report is not merely to review the literature. Several excellent reviews and bibliographies already exist (1–3). Our purpose is to establish, after recent and widespread changes in law and practice, what are the current problems on which new research is required and practicable. Our review will therefore be selective and biased towards topical issues.

We interpret the term " psychosocial " widely. We are not just concerned with " psychiatric indications for, or psychiatric sequelae of, induced abortion ". We take the word " psychosocial " not to refer merely to pathology but to comprehend states of feeling, motivation, and responses (whether they be sick or healthy), and the social context from which they arise and by which they are influenced. Moreover, our concern is not with the value questions of whether abortion is or is not justifiable on psychiatric grounds (although this inevitably arises), but with the events leading to unwanted pregnancies, the decision-making processes, the clinical procedures, and the supporting services in so far as they relate to the psychological state of the woman and her family. It is within this wide framework that we discuss initially the sociocultural and legal context of family planning and abortion.

SOCIOCULTURAL AND LEGAL CONTEXT

Spontaneous abortion, despite its frequency, its uncertain etiology, and the distress caused to the individual, has never attracted the emotional concern or the concentrated research effort recently accorded to induced abortion. The distinction is, of course, that spontaneous abortion is regarded as an involuntary, physiological process, whereas induced abortion is both a voluntary act and, according to interpretation, a freedom for the woman or a threat to established social institutions. Family, marriage, and parenthood are such fundamental institutions in all societies that they are surrounded with strong sanctions. The intention of such sanctions is to induce individuals to accept as moral and desirable a particular pattern of behaviour, to deter them from contravening moral rules, and to demonstrate, by

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example, the inadvisability of contravention. Basically these are guilt-inducing processes and neither individual nor group attitudes towards induced abortion can be understood without reference to the rules regularizing sexual, marital, and familial behaviour.

Many variations exist among societies in the detailed organization of these institutions. Patterns relating to age at marriage, sexual intercourse, and family building and maintenance vary among societies with differing historical and religious traditions. The patterns reflect differences in historical experience, climate, health, economic organization, etc., but until recently certain ideological features were common to almost all societies. First, all societies have developed institutions that can be loosely called " marriage " and " family " and that are intended partly, perhaps primarily, for the regulation of sexual and reproductive relationships and the maintenance of children. Secondly, all societies have rules regulating sexual relationships before or outside marriage, the common feature being the necessity to allocate responsibility for the care and maintenance of resulting children. Extramarital sexual activity has been widely condemned because it endangers this principle of responsibility. Thirdly, almost all societies have attached a high value to fertility and have either condemned or pitied the childless woman. Fourthly, fertility control within marriage has been rare, control being exercised by abstinence or by indirect means, such as late marriage or prolonged lactation, and associated taboos on intercourse. Fifthly, within marriage the male has been the dominant, initiating, and decision-making partner and the owner of his children, the wife being the submissive, accepting partner.

Abortion and until recently contraception have been regarded not merely as technically difficult or dangerous, but as threats to these established patterns and characterized as deviant activity alongside other disapproved behavioural acts, such as premarital intercourse, adultery, illegitimate pregnancy, and homosexuality. The rules have been upheld in three ways: by law, by religion, and by custom.

Legal rules

Laws have been established and enforced by police and courts, offenders being publicly condemned by sentences that both punish the offender and demonstrate the official code of the society. Such laws have, at many times and places, been applicable to premarital intercourse, adultery, illegitimate birth, the sale and use of contraceptives, and recourse to abortion. Punishment may extend to those aiding and abetting (doctors, midwives, pharmacists) and even to the innocent products of conception, i.e., illegitimate children.

Religious rules

Not all illegal acts are detectable; and thoughts, motivations, attitudes, and values are not enforceable by law. The self-regulation of conduct through the formation of conscience and moral values is clearly desirable in such legally unenforceable activity. Most religious codes give to chastity, marriage, and family life a sanctity that militates against contravention because contravention is felt to be not merely inexpedient but sinful. The range of behaviour covered by such rules is more extensive than that covered by legal rules.

Customary rules

The least obvious, but nonetheless effective, way in which thought and behaviour are controlled is through the pressure of customs and social relationships. These, too, reach into areas of activity and ideology undetectable and unenforceable by law, and they act through the creation and maintenance of conscience. The mechanisms of enforcement, however, are different. Customary rules are maintained through continuous and pervasive precept and example (socialization) and through the disapproval of peers, relatives, neighbours, and friends.

As modern mobile, industrial society moves towards new patterns, innovations may initially be labelled as deviant; as change becomes more widespread, official codes may change and the erstwhile deviant may become legally moral. Religious and customary rules, however, part of whose force derives from their apparent permanence and lack of relativity (god-given), change more slowly, and persons following the new official code may nevertheless sense social disapproval and experience guilt and self-condemnation. Until new religious and customary rules evolve, contradiction between behaviour and one or more codes may be acute. A number of research implications flowing from these remarks have a bearing on the interpretation of past literature.

(1) Because of differing cultural, religious, and legal rules, and the strength of their enforcement, abortion has a different meaning from country to country and from one period to another. Research studies that are all formally concerned with an

event called abortion may, in fact, be measuring different phenomena. Scientifically, therefore, the literature cannot be aggregated but must be treated as a historical sequence.

(2) Much past literature, even though relatively recent, is not fully applicable to contemporary problems. The social situation and psychological orientation of women, families, and doctors have changed, and we are now concerned with legal, administrative, clinical, and welfare problems of a different order. For many countries the problem is no longer strictly a matter of legality or morality but of the most humane and effective method of organizing an abortion service within a health system.

(3) In epidemiological terms, findings about the few patients who are referred for abortion in a restrictive system cannot be equated with the results of large-scale studies of patients in a society in which abortion is performed upon request.

(4) Guilt about abortion has been, and in most societies continues to be, deliberately induced as part of a traditional system of social control. In such circumstances it is superfluous to ask whether patients experience guilt—it is axiomatic that they will.

(5) In restrictive systems, persons who penetrate the control barriers to obtain an abortion must automatically be regarded as " deviant ", being a highly selected group with strong motivation, exceptional social situations, or overt severe pathology.

(6) Only in recent times and in a limited number of societies has it been possible to distinguish the intrinsic effects of abortion or repeated abortion from other socially-induced consequences.

GENERAL PROBLEMS OF THE PSYCHOSOCIAL RESEARCH FIELD

The flux of psychiatry

Psychiatry, rather than psychology or sociology, has been the dominant discipline concerned in past research about the psychosocial aspects of abortion. Research on psychiatric factors has built up over several decades during which psychiatry as a discipline has itself changed considerably in its theoretical, conceptual, and methodological bases. Early literature was heavily influenced by the psychoanalytic approach, with its emphasis on unconscious or subconscious sexual drive, Oedipus complex, pregnancy as fulfilment, etc. The later development of behavioural and sociocultural approaches to psychiatry—based on quite different premises concerning etiology, diagnosis, and treatment—meant the coexistence of a spectrum of psychiatric perspectives. The request for abortion could be seen as intrinsically indicative of psychopathology, a rejection of the feminine role, overidentification with a father figure, a conscious or unconscious desire to take revenge on either self or another, response to situational factors, avoidance of stigma, or just the desire not to have a baby at that time.

The conflict of theoretical perspectives is compounded by terminological and methodological uncertainties. Practising psychiatrists have usually become concerned with abortion research because they have had to decide on a course of action for a patient. National laws and professional ethics have usually forced clinicians (and most research reports are conducted by clinicians on their own patients or those of their clinics) to formulate the problem in terms of health or illness rather than of motivation or feeling. " Illness " hides a variety of symptoms, indications, types of behaviour, and feelings. Even a cursory glance at the literature reveals that under the terms " psychiatric indications or sequelae " are included categories as diverse as schizophrenia, depression, generalized states of anxiety, disturbance or stress, aspects of personality (e.g., vulnerable personality, psychiatric insufficiency, sadomasochism), feelings of distress that are not necessarily indicative of personality problems or of mental illness (e.g., regret, guilt), and behaviour variously capable of being treated as rational or as indicative of psychopathology (e.g., suicidal threat, marital conflict).

Problems of interpretation are complicated by the fact that the criteria for diagnostic judgements are not usually spelled out or validated by independent observers. Moreover, it is clear that psychiatric indications and sequelae have been influenced by legal criteria: " psychosis " was an acceptable term for both action and publication, but termination for reasons of distress was a cause for prosecution rather than publication.

Methodologically, the psychiatric research problem is inherently acute quite apart from the softness of psychiatric theories and terminology. At the point of pregnancy referral, several possibilities as regards the patient's psychiatric state may apply:

(1) The patient may have been previously treated for psychiatric disturbance. Such disturbance, however, may have been temporary, nonrecurrent, or situational, and it may recur with or without re-

newed stress. The clinician is dealing with probabilities of recurrence.

(2) The woman may have had a previous psychiatric disturbance, which, however, has never been identified and treated. Here the clinician must attempt to reconstruct prior events at a point when the patient is already under stress.

(3) The woman may have had no history of psychiatric abnormality but may be judged (variously by different observers) to be especially vulnerable. Again, therefore, the clinician is predicting.

Even *post-hoc* interpretation of the dynamics of the case must also be in terms of probabilities. Women referred for abortion are, by any definition, different from those not so referred. One may also expect a higher incidence of psychiatric disturbances among women with a history of previous psychiatric problems. The post-abortion or post-partum prevalence of mental illness in this group is thus likely to be high. How can cause and effect be established? It seems inescapable that every judgement made by a psychiatrist involved in a particular case must be a mixture of scientific knowledge, clinical hunch, personal temperament, moral stance, and professional ideology. In effect, the psychiatrist has frequently been placed in an impossible position. To avoid political or moral debate, society has often recruited the psychiatrist, with his indefinable but humane perspective, to soften the harsh provisions of the law. Whilst psychiatry has played a by no means ignoble role, its medical-scientific component is debatable; indeed it is the very " softness " of its data that fits it for this role. It is, therefore, unreasonable to expect conclusive scientific findings.

The implications from this discussion are:

(1) That future research should be formulated, designed, and reported to give the maximum of descriptive, factual, and observational materials, so that its reliability can be tested, its assumptions validated, and its findings replicated.

(2) That as long as decisions are made by persons other than the woman herself, research should identify and allow for the built-in assumptions of professional decision-makers.

SEXUAL BEHAVIOUR AND FAMILY PLANNING

In its psychosocial context, abortion may be seen as one choice in a series of events, decisions, and pathways that begin with sexual relationships. At the point of expected or unexpected sexual intercourse at least four " choices " need to be made: whether intercourse should occur, who should be the partner, whether or not contraception should be employed and, if so, what kind of contraception. " Choice ", however, is frequently a misleading term because choice was either not perceived as existing or had a priority so low that it was effectively nonexistent. The existence or perception of choice, and the values attached to each option, are determined culturally and psychologically.

If ultimately, through unprotected intercourse or contraceptive failure, pregnancy occurs, a further range of choices confronts the woman. If she is unmarried, should she, can she, marry and thus bear a child that, though unexpected, finally may not be unwanted? Should she bear an illegitimate child and accept the role of motherhood? Or should she bear the child and have it adopted? Alternatively, should she seek an abortion, legal or illegal? If she is already married to the father of the child, her choices are limited to continuation (with or without adoption) or termination. Involved in these decisions is a constant interaction between individual psychology; social pressures and constraints; and individual actions that precipitate societal responses, which, in turn, have an impact on the social and psychological state of the woman and her partner.

Research on abortion should always be formulated in full cognizance of this context. It involves consideration of the possible relevance of the following factors.

Family size

Where, as in most advanced industrialized countries, norms or aspirations for education and material rewards compete with children, the desired size of families becomes much smaller than it would be at natural levels of natality. Abortion is likely to raise serious policy issues when the desired family size is such as can be obtained only by mobilizing all antinatal techniques.

The status of contraception

Here we refer to the technical properties, availability, and practical and moral acceptability of contraception. The historical sequence of family reduction, contraception, and abortion is clearly an important determinant of attitudes to abortion among women, the medical profession, and society generally. It thus influences the characteristics—both medical and social—of the population groups that seek abortion,

the frequency of abortion use, and the structure of medical and supporting services.

The status of alternatives

If illegitimate pregnancy carries a stigma, other alternatives automatically appear to be more attractive, and the single girl may opt for a marriage that would otherwise seem undesirable. Research on total populations designed to demonstrate the relative frequency of each " pathway " would provide good indications of the availability and perceived acceptability of each alternative.

The status of women

Societies in which women are wage-earners on an equal footing with men not only confer a degree of independence in decision-making upon the woman but are also likely to make available the nursery and care arrangements that make unmarried motherhood more supportable. We are aware of no studies that explicitly examine the influence of the status of women or of supporting services on the abortion decision.

Freedom of sexual relationships before and after marriage

The sharp rise in illegitimate pregnancy in Western Europe and North America is evidence of a changing attitude towards premarital chastity and extramarital sexual relationships (4, 5). It pre-dated the introduction and easy availability of oral contraceptives and of relatively liberal abortion laws, but may well have hastened liberalization. Kingsley Davis (102), discussing Japanese and other experience, suggested that abortion represents one part of a massive demographic response to changed social and economic conditions in a process of demographic change and response in which change in one component is eventually altered by the change it has induced in the other components. Each of the factors listed above represents one component in this complex process, and the temptation has been to treat abortion separately from these other aspects of sexuality, reproduction, and population.

REFERRAL AND DECISION-MAKING PROCESSES

Most empirical research inquiries concerning the possible effects of the decision to terminate or to continue a pregnancy are based on the patients referred to a particular gynaecologist, psychiatrist, clinic, or hospital. The findings are likely to reflect the rules and procedures of that specific situation and to provide few results of general applicability. In the extreme instances where abortion is possible only on grounds of danger to life, the small number of identifiable cases may not justify research, but the volume of illegal abortions may be large. Where only clear-cut medical grounds are acceptable, the population of potential or actual abortees will include a high proportion of women who accept abortion reluctantly on medical advice and where therefore little enthusiasm about the operation can be expected. Where wider grounds of mental health are allowed, the composition of the group of aborted women will exhibit greater heterogeneity and one can expect the population to show, after abortion, a variety of psychopathological manifestations. At the other extreme of abortion on demand, the population of abortees is likely to reflect the culture of the society, its ideas about family size and spacing, and the availability and use of contraception. This section of the report is intended to identify the pitfalls and methodological problems deriving from differences in referral and decision-making.

With the exception of spontaneous abortions and those performed on medical grounds, all aborted pregnancies fall within the category of unwanted pregnancies. They may, however, form only a small proportion of the total of " unwanted pregnancies ". Depending on the time and place of the research, they are likely to exclude one or more of the following categories (some of which overlap).

(1) Women whose motivation for termination was weak.

(2) Women who were unaware that termination might be possible or who considered themselves as ineligible.

(3) Women whose religious or other principles prohibited termination.

(4) Women deterred by spouse or partner, relatives, friends, or advisers.

(5) Women who made up their minds too late in pregnancy or were delayed too long by administrative procedures.

(6) Women who raised the possibility of termination with their doctors too tentatively or indirectly to get a response.

(7) Women who were refused termination.

(8) Women who changed their minds after a positive decision.

(9) Women who procured an illegal abortion.

(10) Women who decided to marry rather than accept the stigma of other alternatives.

(11) Women who decided to continue the pregnancy and have the baby adopted.

(12) Women who aborted spontaneously.

Each of these groups may differ from the others in such a way that its inclusion in or exclusion from a study would seriously affect the social, psychological, and health composition of any population of aborted women or of women refused an abortion. For example, depending on the circumstances, the groups might be biased in terms of age, parity, education, social class, financial status, area of residence, mental and physical health, personality characteristics, marital status, or previous abortion experience. Moreover, where the decision is taken by medical advisers, selection would occur on the basis of the legal, medical, and other criteria acceptable as indications, the professional ideology and moral stance of the doctor, and the availability of beds and facilities.

In the literature reviewed in the next two sections, authors most frequently describe their studies in such terms as the following: " the author followed up 32 cases referred for abortion on psychiatric grounds compared with 48 women who were refused an abortion and a control group of 50 pregnant women who did not apply for termination ". Such a design or description may at times be adequate for highly specific and limited purposes. Clearly, in view of the selectivity indicated above, it would be of little value outside the clinic concerned.

Ideal experimental conditions rarely exist in research on human subjects. The next best alternative is to adopt comparative methods of empirical investigation that permit, by their very design, definitive answers to specific questions. Such studies only arise accidentally out of routine clinical practice. The comparative method often requires collaboration among centres that differ from each other in specified ways, and methodological considerations demand the participation of specialists with skills not usually present in a clinical team.

PSYCHIATRIC AND PSYCHOLOGICAL CORRELATES AND CONSEQUENCES OF ABORTION

The status of the psychiatric literature has been discussed under " General problems of the psychosocial research field ". It is sufficient, at this point, to remind the reader of the extreme divergence of views among psychiatrists on what constitutes a psychiatric indication for abortion. Sim (6) states that there are no psychiatric indications for abortion, while Peck & Marcus (7) report good results from therapeutic abortion in schizophrenics. Opinions on the possible psychiatric sequelae of abortion are equally diverse. Bolter (8) " has never seen a patient who has not had guilt feelings about a previous therapeutic abortion or illegal abortion " but Kummer (9) reports that 75% of 32 Californian psychiatrists had never seen moderate or severe psychiatric sequelae of abortion. An explanation for this wide range of opinions seems to be the inadequacy of much of the published work in terms of definition of the population involved, assessment of the psychological status of the women before the unwanted pregnancy or the abortion, and the follow-up of cases.

Suicide

The first question is whether the risk of suicide constitutes an indication for abortion, since, where legislation allows abortion only if the mother's life is at risk, threatened suicide is relatively common in women seeking abortion. Several authors have reported that suicide in pregnancy is rare (10–12). What is lacking from these reports is any indication of the likelihood of suicide in unwanted pregnancy. Since wanted pregnancies far outnumber unwanted ones, a high incidence of suicide in the small number of women with unwanted pregnancies could well be concealed in a low total incidence of suicide in pregnancy. Other authors have certainly found that suicide can occur in association with unwanted pregnancy (13–15). The possibility that other such deaths may not be recorded as suicide owing to the social and religious stigma involved has been widely documented in other fields. Some authors have suggested that suicide rates will be lower where abortion is available. Evidence presented by Hoffmeyer (16) in Copenhagen, Patt et al. (17) in Chicago, and Visram (18) in Manchester seems to support this opinion. Even so, suicide in unwanted pregnancy will not always be prevented by abortion. Suicidal attempts following abortion are reported by Patt et al. (17) and by Meyerowitz et al. (19).

In summary, it seems that, although suicide in pregnancy is rare, the rate of suicide in unwanted pregnancy is unknown, and would be extremely difficult to determine. The risk of suicide in women seeking abortion seems to be small but real. Psychia-

tric referral is indicated where suicide is threatened, since such women need detailed pre-abortion assessment and careful follow-up whether abortion is performed or not. Further research in this field does not seem likely to be profitable.

Post-partum psychosis

Depression in the puerperium occurs in almost 3% of women (20), but psychosis is rare (21). The risk of recurrence in a subsequent pregnancy has been estimated as between 1 in 4 in Chicago (22) and 1 in 7 in Eire (23). This risk has often been considered to be a good indication for therapeutic abortion, but psychosis may recur at times other than in pregnancy in as many as 20% of cases (21). Martin (23), Sim (6), and Joyston-Bechal (24) consider that, since the condition responds well to treatment, therapeutic abortion is not indicated and indeed may be more harmful than allowing the pregnancy to continue. Jansson (25) finds that post-abortum psychiatric insufficiency is more common (1.92% of cases) than post-partum insufficiency (0.68%), whereas Fleck (26) states that post-abortion psychosis is extremely rare compared with post-partum psychosis. It would certainly seem that pregnancy is more hazardous in women with a previous history of post-partum psychosis, but Bernstein (11) points out that prediction of post-partum psychosis in the individual case is very difficult.

Psychosis, psychoneurosis, and depression

Even in conditions such as schizophrenia, where the diagnosis is relatively clear-cut and the natural history of the disease is well documented, there is a wide range of opinions among psychiatrists on the correct management of a schizophrenic woman who seeks termination of an unwanted pregnancy. Evaluation of the literature is made difficult by the failure of many authors to distinguish different forms of severe psychiatric disease when describing their abortion-seeking patients.

Anderson et al. (27), Sim (6), and Joyston-Bechal (24) suggest that women with schizophrenia and depression should receive standard psychiatric treatment rather than therapeutic abortion, but they do not report data to support this conclusion. Niswander & Patterson (28), Pasini & Stockhammer (29), Meyerowitz et al. (19), and Ford et al. (48) report small numbers of individual women with prior psychiatric disease who were disturbed following therapeutic abortion.

There are, however, reports that pregnancy has an adverse effect on the schizophrenic process (30).

Many authors (e.g., 31, 32) report good results from therapeutic abortion in psychiatric disease, and it has been concluded from prospective studies (7, 33–35) that therapeutic abortion is usually beneficial in women with psychosis, psychoneurosis, or depression; but Whittington (36) and Pasnau (37) emphasise that psychiatrists cannot reliably predict mental illness following abortion.

Much research reported on abortion for psychiatric indications is unreliable because it was done in a situation in which a woman seeking abortion on mainly social grounds had to show psychiatric disturbance in order that the abortion should be legally acceptable, and indeed was likely to become genuinely disturbed by the possibility of not obtaining it. In countries such as USA, where there is now no legal restriction upon the performance of abortion, it seems that research on the purely psychiatric aspects of the problem in women with psychiatric disease will become easier. Clear definitions of criteria for diagnosing and labelling psychiatric diseases would be a prerequisite for useful research, but may be difficult to achieve.

Medical grounds

Patients who have an abortion on medical grounds form only 4–6% of most reported series (38, 39). Such patients have been excluded from many studies of psychiatric sequelae of abortion, such as that of Ekblad (33), so that satisfactory evidence is difficult to obtain. A further problem is that a severe medical condition will often constitute an indication not only for therapeutic abortion but also for sterilization, and the adverse or beneficial psychological effects of the termination may be difficult to separate from those of the sterilization.

It seems that a proportion of women whose pregnancies are terminated on medical grounds run a considerable risk of experiencing guilt or regret (28, 31, 40), but Peck & Marcus (7) found that this was transient and did not require psychiatric treatment. Regret is evidently more common when the abortion is performed on medical grounds than when it is done on psychiatric grounds (4), but it should be remembered that these women may be regretting their inability to have children rather than the specific event of pregnancy termination.

Research should be directed towards determining methods of minimizing the traumatic nature of the termination procedure for these women.

Fetal indications

The proportion of women for whom the reason for pregnancy termination is the risk of fetal malformation is small in most series (3.5% of referrals in Aberdeen in 1963–69 (39). Eugenic indications have been excluded from some studies of psychiatric sequelae (42). Those studies that have been reported have not distinguished between cases of a nonrecurring nature (such as rubella infection in early pregnancy), and cases such as that of a woman whose children have haemophilia or fibrocystic disease of the pancreas and where any subsequent pregnancy would carry a high risk. Emotional problems might be expected to occur more commonly in the latter group, but this area has not been fully evaluated. A high incidence of guilt and depression is reported in women having terminations on account of possible fetal malformations (7, 31, 43)—suggests inadequate emotional support. Research should be directed towards the best method of providing this.

There is little or no information about the psychological and psychiatric correlates of abortion performed because of mental deficiency in either parent.

Women without overt psychiatric disease at the time of referral for abortion

Psychological/psychiatric characteristics. There is considerable doubt whether women who seek abortion differ from other women in any respect other than having an unwanted pregnancy with which they have decided not to continue. Several difficulties arise in answering this question. First, assessment of personality traits should ideally be made prior to the crisis of the unwanted pregnancy, since assessment at the time when abortion is sought may be biased towards abnormal results that are due to the pregnancy itself (44), to the fact that it was unplanned or unwanted, or (as in the case of rubella infection) doomed to an unsuccessful outcome. Apparently disturbed personalities may be attributable to the adverse social circumstances, such as unemployment or poor housing, that make the continuation of the pregnancy impossible (45), to the break-up of the relationship with the putative father that has led to the abortion request (46), or to pregnancy resulting from rape (47). Beric et al. (47) also suggest that worry whether or not the abortion will be performed is a prominent factor in producing disturbance.

A further problem is that assessment by psychiatric interview may be biased by the opinions and background of the interviewer and produce results difficult to measure, whereas " objective " psychological and personality tests, although easier to score, are relatively crude. Simon et al. (31) and Ford et al. (48) noted a high incidence of " sadomasochism " in women who had undergone abortion, but no control group was used. The selection of control groups for studies giving an assessment of preoperative personalities has never been ideal and has sometimes been quite bizarre—for example Kenyon (49), in stating that women seeking pregnancy termination tended to be promiscuous, was comparing them with routine psychiatric referrals! Both Brody et al. (50) and Niswander et al. (51) tested applicants for abortion, before and after they applied for abortion, and found that they were depressed, anxious, and impulsive, compared with normal pregnant women. However, since the pregnant women were all married and many of the applicants for abortion were single, the comparison does not seem very useful. Olley (52), in Aberdeen, compared 207 married women seeking termination with 80 normal pregnant women matched for age, social class, and gestation. His control group for 163 single women seeking termination is less satisfactory in that it consisted of 700 nonpregnant student nurses. He found that the married abortion seekers, tested before they knew whether their request would be granted, showed neurotic personality patterns, compared with the control group, whereas the single women showed psychopathic features with " accident-prone " tendencies.

Brody (53), however, reports an interesting long-term follow-up study of 5 200 schoolgirls in Minnesota, with psychological tests, teachers' reports, etc. Comparison of those who became illegitimately pregnant while at school (117) with a control group showed no differences in personality or intelligence. Brody suggests that the pregnancies occurred because of chance, errors in planning, and ignorance, rather than any psychological predisposition. It is not known whether these girls sought abortion, however.

Some evidence suggests that within the total group of abortion seekers there is some difference between those who seek abortion early and those who delay. F. D. Johnstone (unpublished observations, 1973) found that, in London, women who applied late for abortion were more likely to be young, single, of low parity, less well educated, and without financial support than were those who applied early. They were also less likely to have used contraception and more likely to have broken with the putative father.

Oppel et al. (54) suggested, in a comparison of 100 women having saline terminations in the middle trimester with 100 women having first-trimester suction terminations, that the former were more dependent. Perez-Reyes & Falk (55), in a study of 41 adolescent girls tested and interviewed before and 6 months after abortion, found that those who required saline termination, owing to late application, showed more ambivalence, denial, and difficulty in discussing the problem, often associated with poor relationships with parents and putative father, or with psychiatric illness. M. R. Rekant (unpublished Ph.D. thesis, Boston University, 1973), in a very detailed pre- and post-abortion study of 30 single women, found that those who attended late were less adaptive, less sure of their feminine identity, and on less satisfactory terms with their parents.

Repeated abortion seekers may also differ from first-abortion seekers. Rovinsky (56) noted that they are more impulsive, and Pasini & Kellerhals (57) showed that they are more likely to have had a previous psychiatric consultation.

In a legal and social situation permitting abortion on demand and providing contraceptive education and equipment, the question whether abortion seekers are psychologically distinctive has not been answered. In such a community, the question could now be asked, and perhaps answered, with the help of control groups differing from the abortion seekers only in respect of the decision to seek abortion.

Sequelae. Reports of the psychiatric sequelae of abortion in women who are not suffering from obvious psychiatric disease at the time of seeking an abortion vary from the pessimism of Bolter (8), who has never seen a patient who did not have guilt feelings about a previous abortion, to the optimism of Osofsky et al. (58), who describe relief as the usual sequel. The wide range of opinions seems to be due to the failure of some authors to take into account (*a*) previous psychiatric illness of the patient; (*b*) the stigma attached to unwanted—particularly illegitimate—pregnancy, irrespective of whether it is aborted; (*c*) the marital discord or break-up of sexual relationships that often precipitates the decision to seek abortion but persists as a stress whether or not abortion is performed; (*d*) the traumatic effect on the psyche of all surgery, particularly on the genital tract (59); (*e*) the possible adverse psychological effects of sterilization, which is often combined with abortion; (*f*) the distressing effect of hostile clinic and hospital staff and other ward patients; (*g*) the potential trauma of administrative problems, such as delays in decision-making and in admission for abortion after the decision has been made, and admission to maternity wards where the patient may see and hear neonates; and (*h*) ignorance of patients regarding the likelihood of somatic sequelae (e.g., Milojevic et al. (46) report that 24% of minors undergoing therapeutic abortion in Belgrade had marked fears of future sterility).

Most reports of high rates of adverse psychological sequelae of abortion are based on personal opinions unsupported by reported data (6, 8, 60), on very small series (25, 61), or on surveys of subjects some of whom had had abortions, legal or illegal, many years previously (17, 31, 62). Aren (63) interviewed 100 randomly selected women about 3 years after abortion and found 23% with feelings of severe guilt and 25% with mild guilt. However, no investigation of prior psychiatric illness, or of the indications for abortion, is recorded. Ford et al. (48), interviewed 21 women before and 6 months after abortion and reported that 96% showed transient depression, as many as 14% being more disturbed than before. Milojevic et al. (46) reported a high incidence of depression (11%) in young girls who had abortions, where the reason for the abortion was abandonment by the male partner.

Many reports of rare adverse sequelae are also inconclusive, sometimes because no personal data are reported (9), because the arrangements for follow-up of patients are not explained (19, 37, 47, 64), or because the follow-up consisted not of personal interview but of mail questionnaires to which reply rates were low and the results inevitably biased by the absence of data about those who did not reply (28, 36, 65). Clark et al. (32) and Ingham & Simms (66) also used unsatisfactory follow-up arrangements, such as letters, the telephone, and general-practitioners' reports. Osofsky et al. (58) and Rekant (unpublished Ph.D. thesis, Boston University, 1973) report very good psychological results of tests administered within 6 weeks of abortion, but this does not allow for the possibility that adverse reactions are more likely to manifest themselves much later, as reported by Ekblad (33).

However, there is now a substantial body of data, reported from many countries, suggesting, after careful and objective follow-up, that there is a low incidence of adverse psychiatric sequelae following abortion and a high incidence of beneficial reactions. One of the earliest thorough studies was that of

Ekblad (33), who personally interviewed 479 women having abortions on psychiatric or social grounds in Stockholm in 1949 and 1950, both before discharge from hospital and 2–5 years later. He found relatively serious self-reproach in 11% of the women but he considered their depression to be mild in psychiatric terms. It occurred more often where sterilization had been made a condition for the abortion to be performed, and was at least partly due to the sterilization. Only 4 women (1%) were unable to work because of impaired mental health, and Ekblad considered that the break with the male partner was probably the cause of the depression. He also stated that it was likely that they would have developed equally severe symptoms of insufficiency even if they had not been granted legal abortion. In a study of 34 Norwegian women, Brekke (67) found that 94% had no disturbance at all and 6% had only slight transient guilt. Peck & Marcus (7) interviewed 50 Jewish American private patients before and 3–6 months after abortion and found only one who regretted the operation, although 20% had experienced mild guilt. In Korea, Hong (68) found that 10% of patients experienced some degree of guilt and adverse psychological reactions. In the United Kingdom, Pare & Raven (40) followed up (mostly by interview 1–3 years later) 250 of 270 abortion seekers who had been referred for a pre-abortion psychiatric opinion. Of 128 whose pregnancies were terminated, all but 2 were glad to have had the operation, although mild guilt lasted for more than 3 months in 13%. In San Francisco, Margolis et al. (34) followed up 43 of 50 women aborted 3–10 months previously, by interview and psychological testing (which was done also prior to abortion), and reported benefits in terms of increased wellbeing and empathy, as well as a sense of freedom and femininity. Ford et al. (48), in a similar study in 30 indigent Los Angeles women with pre-abortion interviews and psychological tests repeated 6 months later, found marked improvement in 43% of nonpsychotic patients. The same study design was used by Niswander et al. (51), although only two-thirds of the women were seen 6 months after abortion. Test scores showed a significant improvement following abortion. In Aberdeen, Aitken-Swan (45) conducted a sociological interview prior to abortion and 4–5 months later. Of 50 single women, 21 felt sadness or guilt, but 46 were convinced of the rightness of their decision. Of 52 married women, 48 were sure that abortion had been the right decision. Psychiatric interview and psychological testing in Aberdeen before and 13–43 months after abortion (35) showed that 15% of single women and 30% of married women were depressed and anxious. However, the post-abortion depression was frequently due to stresses other than that resulting from the abortion. The psychological tests showed a marked improvement at follow-up of women who had had an abortion. In summary, it seems that, where careful pre- and post-abortion assessments are made, the balance of the evidence is that psychological benefit is common; guilt does occur, but serious adverse sequelae are very rare. It should be remembered that the woman with an unwanted pregnancy finds herself in a situation in which all the available solutions have some possible disadvantages. There certainly does not seem any real basis for a fear that adverse psychiatric sequelae will commonly result if she and the physician choose abortion as the solution.

OUTCOME OF REFUSED ABORTION

Outcome for the mother

Reports of adverse emotional reactions following induced abortion have often ignored the possibility that adverse reactions can also result from refusal of abortion. Comparison of the incidence of adverse reactions in these groups is of limited value for the following reasons.

(1) Patients whose requests for abortion on any medical, psychiatric, or social ground are refused, are likely to be, in the opinion of the deciding doctor, healthier and more " stable ", and to have better social and financial circumstances than those whose requests are granted. Olley (52) has shown that psychological testing at the time of referral in Aberdeen identifies the patients who obtain a termination as more " vulnerable " than those who do not. Thus the " refused " group might be expected to show a lower incidence of adverse reactions if induced abortion and refused abortion are equally traumatic.

(2) There is a high incidence of illegal abortion, or legal abortion obtained elsewhere, in many studies of refused abortion. This means that the residual group of women who continued their pregnancy tends to include more of those who were less strongly motivated towards abortion in the first place, or who are less able to cope with the difficulties of seeking another opinion. The rate of induced abortion obtained elsewhere in studies of women refused abortion varies: 12% in Sweden in 1940–46

(69); 11% in Sweden before 1963 (70); 24–36% in the United Kingdom in 1962–72 (40, 66, 71); 75% in San Francisco in 1971 (34); and 43.6% in Switzerland in 1959–63 (72). These are, of course, minimum rates, since many authors suspect that some of the " spontaneous " abortions in their series were, in fact, self-induced or illegally induced.

(3) Follow-up of refused abortion is often incomplete, since the women concerned often do not want to cooperate with the staff of the hospital who refused them the help that they sought.

Thus it cannot be suggested that the outcome of refused abortion represents what would have happened to the women whose pregnancies were terminated, had they been refused. Study of the outcome of refused abortion is nevertheless of great interest, since the sequelae of refused abortion for the mother are likely to be of a different order altogether from those of termination. The latter is a surgical operation that lasts at most an hour and can often be concealed from friends and family, although it may have great emotional significance for the mother, whereas the former involves a much longer period of incapacity for work during the pregnancy, is usually obvious to all with whom the mother comes in contact—frequently with unpleasant connotations, if the pregnancy is illegitimate—and, finally, there is usually a period of responsibility for the child, which will last 15–20 years. Curran (73) has pointed out that the actual stress of childbirth has often been less important (in producing " mental wrecks ") than the continuing stress that resulted from the childbirth in the form of the child.

Women with overt psychiatric illness

It has been suggested by Sim (6) that termination of pregnancy is not indicated in women who seek it on account of schizophrenia, since the disease does not worsen during pregnancy. Other studies suggest that the long-term outcome of continuing the pregnancy may be unhappy. Arcle (74), in the United Kingdom, followed up 22 women with mental illness who had been refused termination, a year later, and although he found that their mental state was unchanged or improved, he also noted that the majority of the psychotics, mental defectives, and psychopaths were quite unable to look after their homes and children. Yarden et al. (30) followed up 67 married pregnant schizophrenic women in Jerusalem for 1–5 years and compared them with a control group of 67 nonpregnant married schizophrenic women (matched for age, race, severity and duration of disease, social class, and parity), and suggested that in terms of social adaptation pregnancy did in fact aggravate the disease, probably owing to problems with child-rearing. Weissman et al. (75) studied 40 depressed women and 40 women of a control group, and found marked impairment of the capacity of the depressed women for mothering. In neither of these studies were the pregnancies declared to be unwanted; the outcome might well have been worse if they had been. Hoffmeyer (43), in Denmark, reports that, of 180 women refused abortion, 13 who were mostly psychopathic and mentally defective had no feeling for their babies.

Women without overt psychiatric disease

An unsatisfactory outcome is widely reported in studies of " normal " women refused abortion, but follow-up was often inadequate (very small proportion of cases seen for follow-up, follow-up consisting only of letter, telephone calls, and questionnaires)—e.g., Kolstad (76) in Norway; Clark et al. (32), Todd (71), and Ingham & Simms (66) in the United Kingdom; and Marder (64), Meyerowitz et al. (19), and Brody et al. (50) in USA.

More detailed and complete studies have also uncovered considerable distress and dissatisfaction among women who were refused abortion. Kind & Heusser-Willi (72) report no serious or permanent impairment of mental health in 66 women who completed their pregnancies in Zurich after refusal of abortion (when 13% of referrals were refused), but it should be remembered that in this series nearly half of the women refused actually obtained an abortion elsewhere. In Denmark, Hoffmeyer (43) reports that, of 121 women who kept their children, only 31 were happy and 40 encountered serious trouble in bringing them up. In Sweden, Hook (70) found that 24% of 249 women who were refused abortion were significantly disturbed after 18 months; 31% considered themselves dissatisfied and poorly adjusted and 7% were certified as unfit for work after 18 months, rising to 13% later on. In Los Angeles, in a prospective study of 40 indigent women seeking abortion Ford et al. (48) found that, of the 10 women who were refused abortion, those who did not abort spontaneously showed continuing ambivalence and distress 6 months later. In London, Pare & Raven (40) interviewed women 1–3 years after referral for abortion in a situation where 54% were refused. Of 43 women who were refused termination after a psy-

chiatric consultation, 34% regretted the decision and 4 had serious psychiatric illness. Of 28 who were refused without a psychiatric opinion, 3 had severe adverse reactions. One-third of the women in this series showed evidence of resenting their babies. In Manchester, Visram (18) followed up 95 women, mostly by interview 2–15 years after refusal of abortion, referral having been refused in 55%. Of 73 who continued with the pregnancy, 6 attempted suicide and, of the latter, 2 made serious attempts and another 2 did in fact commit suicide; 34 women were considered to have adjusted poorly to their situation; and in 51% of cases the environment for the child was unfavourable. In Aberdeen, in 1967–68, when referral was refused in approximately one-third of cases, follow-up of refused cases by a sociologist during their pregnancy (45) showed that, among single women who were refused abortion and who continued the pregnancy, 2 of the 5 who later married, and 8 of the 12 who did not, would have preferred abortion. Of 18 married women, 8 would have preferred abortion. Psychiatric follow-up interviews 1–3 years later in the same study (35) showed that, on psychological testing, the women who were refused abortion had subsequently improved, as a group. However, 26% of single women and 30% of married women were depressed; 40% of the single women and 33% of the married women regretted the decision. Of 16 single women whose babies were adopted, 9 had mixed feelings and some regrets, and one had severe regrets. Five of the 61 married women had " less than normal " feelings for their children and 2 whose illegitimate babies were adopted severely regretted both the continuation of the pregnancy and the adoption.

In summary, it seems that, although many women who are refused abortion adjust to their situation and grow to love the child, about half would still have preferred abortion, a large minority suffer considerable distress, and a small minority develop severe disturbance.

Outcome for the child and the family

The potentially damaging effect of a continued pregnancy on the child, other children, and the family unit in general is now widely accepted as a factor to be considered in termination decisions. Many authors (66, 70, 73) have commented, or produced some incomplete research material, on the outcome for the child. It is significant, however, that only one major controlled study has been completed (77) and that this was based solely on documentary information. A current Czech study (78), based on documentary and interview data on 313 cases in which abortion had been twice refused in 1961–63, is currently being conducted in Prague and appears to have taken account of the major methodological problems.

The pioneering work—still unsurpassed—of Forssman & Thuwe (77) showed that more of the unwanted than of the control children were registered in psychiatric services. They were more often registered for misconduct while drunk, and they received public assistance more often than the control subjects did. Far fewer had continued their education beyond the compulsory age. More of the females married early and had children early than in the control series. Such results are not, and should not be, unexpected. Whereas the social, psychological, economic, and medical condition of the mothers may well have been more favourable than that of the women accepted for abortion, the former undoubtedly differed from the general population in ways that would affect child development. The authors mention " the greater frequency of factors tending to disrupt the stability of the home . . ., such as birth out of wedlock, and death or divorce of their parents while they were still young ". In consequence, more children were brought up in anomalous circumstances. There is, moreover, a suggestion that the mothers were " mentally vulnerable ".

The main factors affecting the outcome of refused abortion for the child are:

(1) the characteristics distinguishing abortion seekers from other pregnant women;

(2) the criteria of selection employed by decision makers;

(3) the effect of the abortion-seeking behaviour and refusal of the abortion on the mother's attitude towards the pregnancy; and

(4) public attitudes towards, and support services for, mothers and children possessing the characteristics under (1) and (2) above, e.g., unmarried mothers and illegitimate children.

Clearly, there cannot be a single answer to the question whether " refused-abortion-children " differ developmentally from other children. The answers will vary across societies and from time to time within a society according to the applicability of the factors listed above. The research problem is further complicated by the fact that whether a child is overtly wanted or not wanted will itself be affected

by the freedom with which abortion can be obtained and hence the perception by the mother of alternatives to continuation.

Research projects that attempt to determine the effect of a refused abortion on the state of the child 10–15 years later must encounter severe methodological problems because of the intricate developmental sequences occurring over a long period. It is essential to know the social and psychological circumstances in which children of unwanted pregnancies are reared (separate subgroups of unwanted pregnancies being treated separately). This knowledge, together with what is generally known from social paediatrics, developmental psychology, and the sociology of the family, will enable us to predict the cause-and-effect relationship.

ADMINISTRATIVE ASPECTS

Pre-abortion counselling

Although in many countries abortion is legal only on medical grounds, it is generally recognized that unwanted pregnancy is not a " disease " for which " treatment " can be prescribed, and that a careful evaluation of the woman's motivation and background is essential.

Unlike many decisions the woman will have to take in her life, the decision to terminate or to proceed with an unplanned pregnancy is irreversible. In addition, the possibility of discussing the advantages and disadvantages of abortion with friends and relatives may be very restricted. Lambert (79), in a survey of 3 000 unwanted pregnancies seen in London, reports that only 34% of single girls had informed their parents and in 33% of cases the putative father either had not been told of the pregnancy or had taken no interest in the decision. Osofsky & Osofsky (80) reported that 47% of their patients considered the decision a difficult one to make. It seems therefore that pre-abortion counselling may be not only a helpful but a necessary service.

It has not yet been established by whom such counselling might best be given. Pre-abortion counselling may be given mainly by the woman's personal physician or general practitioner, who is likely to have some knowledge of her social background and medical history and of the possible effect upon her and the child of the available alternative. However, Farmer (81) notes that in Aberdeen most of the practitioners tended to strongly dissuade their patients from seeking abortion and to refer them to a consultant gynaecologist only reluctantly. Considerable doubt may be cast upon the suitability of the general practitioner as a counsellor in the United Kingdom by the fact that large numbers of women go directly to the Pregnancy Advisory Services set up in Birmingham and London, in order to seek advice about pregnancy termination.

Gynaecologists have often performed pre-abortion counselling, partly because they are usually called upon to perform the pregnancy termination and partly because they have a special knowledge of the somatic complications of abortion and of the factors involved in selecting the best operation for the woman whose pregnancy is to be terminated. It is often felt that they also understand the emotional significance of pregnancy because they deal so much with pregnant women. However, their capacity to weigh up the adverse emotional sequelae of abortion against those of continuing an unwanted pregnancy is more doubtful. Certainly there is little evidence of awareness of the possible problems associated with refused abortion among leading British gynaecologists (82, 83). McCance & McCance (84) note the wide variation among gynaecologists in Aberdeen in their rate of granting abortion, although patients seeking abortion were randomly distributed among them. These examples drawn from the United Kingdom have wider relevance because, in restrictive systems, the gynaecologist until recently accepted the responsibility for controlling abortion and has tended in consequence to adopt a conservatice approach.

In many countries, prior to abortion law reform, routine referral to psychiatrists was common, mainly because psychiatric illness or disturbance had to be demonstrated by the woman in order to qualify her for an abortion. Psychiatric consultation, however, may be helpful in other ways. The American Psychiatric Association stated in 1970 (37) that " often psychiatric consultation can help clarify motivational problems ". McCance et al. (35), in Aberdeen, noted that many patients welcomed the interview and the opportunity for discussion. Recent publications, however, have tended to suggest that routine psychiatric consultation is unnecessary. The American Psychoanalytic Association stated in 1970 (37) that the legitimate position of the psychiatrist and psychoanalyst is to serve as a consultant where there is a question of a contraindication to the proposed procedure. Pasnau (37) himself suggests psychiatric evaluation only for women exhibiting psychosis, suicidal ideas, depression, or severe personality and

behaviour disorders. Margolis et al. (34), in San Francisco, suggest that formal psychiatric consultations will be required in only 10–20% of cases. Pasnau (37) goes so far as to say that " routine referral may do more harm than good in that it may activate feelings of guilt or make the patient feel she is doing something ' wrong ' or ' crazy '. " Ewing & Rouse (85) found that only 19–23% of a group of 52 women having abortions thought that the psychiatrist had been helpful. The consensus seems to be that psychiatric evaluation is necessary or helpful in only a small proportion of women seeking abortion.

Committees of doctors (sometimes with lay members) have often been used to provide pre-abortion evaluation (usually leading to the decision whether or not to abort the pregnancy). However, some committees were set up not to provide pre-abortion counselling but to " reduce the number of undeserving requests for abortion and provide impersonal judgement on the applications " (86). Committees are useful devices for reaching impersonal and anonymous decisions, but are of doubtful value for purposes of counselling.

There is considerable doubt whether pre-abortion counselling is best done by doctors at all. Barnes et al. (65) noted that many patients resented being judged by doctors. It may well be that, where the doctor judges, he is not well placed to give counsel. Asher (87) considers that, in USA, the need for counselling can be, and is being, met by a wide range of individuals possessing a variety of skills and experience. He suggests that certain personality traits are important in a counsellor: " empathy, non-possessive warmth and genuineness ... maturity, flexibility, and willingness ... to let the woman make her own decision ". Tanner et al. (88), Dorsey-Smith et al. (89), Sutton & Steele (90), and Aitken-Swan (45) emphasize the value of interviews with social workers.

Counselling by medical personnel arose largely because they controlled decisions, not because they had been shown to give good counsel. Counselling by nonmedical personnel has now arisen in many countries on an *ad hoc* basis, not primarily because lay people had been shown to perform the task better but because doctors were unwilling or unable to cope with the increased load resulting from legislative changes. Experience seems to show that counselling can be done adequately by both nonmedical and medical personnel who are interested in the problem. However, further research seems to be required into the qualifications, background, qualities, and training necessary for a pre-abortion counsellor. In systems where medical personnel make the termination decision, their suitability as counsellors needs special examination.

The ideal venue for pre-abortion counselling is not known. In the United Kingdom, most counselling goes on at routine gynaecological outpatient clinics, but this has proved unsatisfactory, since there is often a long waiting list for appointments at such clinics (91), which is distressing for the woman seeking abortion (F. D. Johnstone, unpublished observations, 1973; 66). Hence there has been much pressure for the establishment of special clinics for women seeking abortion, which have the advantage that they can be staffed by personnel with experience and interest in abortions, although there seems to be some difficulty in preserving anonymity and avoiding stigma. Further research is required into the type of clinic that would be the most acceptable to the woman seeking advice.

Decision-making

In many countries, the decision whether abortion is granted to a woman who seeks it is now left entirely to the woman herself, provided that the pregnancy is not too advanced. Osofsky et al. (58) state that, in one unit in USA, no case was refused at less than 12 weeks' gestation. However, in many other countries, e.g., the United Kingdom, two doctors are required to make the decision on medical grounds (taking social factors into account). Farmer (81) points out the difficulty that British doctors have in taking a decision that is not purely medical. Margolis (92) suggests that medical evaluation is required only to determine if the woman is pregnant, how far advanced her pregnancy is, whether she is fit for operation, and to check her blood group.

Comparison of the relative efficacy or success of different methods of decision-making is difficult, since the characteristics required of the decision-maker will depend on the legal framework within which he or she is required to operate. For example, if abortion is legal only on psychiatric grounds, then clearly a psychiatrist must take the decision; if abortion is always legal, except when gestation is too far advanced, then a gynaecologist should take the decision. However, within the legal framework of any particular country, research with long-term follow-up might be fruitful to determine the somatic, emotional, and social sequelae of decisions made by any particular group of doctors or counsellors, since there are often great variations in the implementa-

tion of any particular law. In the United Kingdom, the incidence of induced abortion in Wales varied from 0.3/1 000 women at risk in Pembrokeshire to 6.6/1 000 in Carmarthenshire in 1969–70 (82). Research into the impact on the woman of the way in which the decision is taken would also be of interest. Techniques such as that described by McCance et al. (35) of positively advising termination if that is clearly what the woman wants may help to reduce later feelings of guilt and remorse. The necessity for an area appeal panel, as advanced by Todd (71) could also be evaluated.

Abortion procedure

Timing. Once a decision to perform abortion has been taken, there seems little doubt that, from a strictly gynaecological point of view, the more quickly the operation is performed, the better, since the morbidity and mortality from the operation rises with gestation. Furthermore, many women find the delay in admission that often occurs very distressing (34, 66). Anwyl (93) has suggested that the woman can and should be hospitalized within 24 h of the decision. However, there are reports of women who changed their minds after abortion had been agreed, who would not have had an opportunity to do so if it had been performed quickly (40, 45). It has not been established whether women who change their minds have made a realistic or sensible decision. Aren & Amark (94) reported on 162 women in Sweden who were granted an abortion but decided not to have it. Although 6 regretted this later, and the outcome for the children in many cases was unsatisfactory, the authors felt that the decision to abstain was usually right.

It would seem that, although for most women speedy abortion—once the decision has been taken—is beneficial, research into methods of identifying those with sufficient ambivalence to merit some delay and further consultation would be helpful.

Type of procedure

The decision which method of termination should be adopted is primarily a gynaecological one, based on the relative safety of different procedures at different stages of gestation. There have been very few reports published on the adverse emotional effects of different procedures. Osofsky & Osofsky (80) report that one-third of patients undergoing suction termination were very fearful of the procedure. They recommend inpatient admission with general anaesthesia for very young and very anxious women, and for those with medical problems. Several authors have commented on the unpleasant experience undergone by patients subjected to amniotic infusion, especially if they are left unattended when abortion occurs (35, 64, 66; M. R. Rekant, unpublished Ph.D. thesis, Boston University, 1973). However, it should be remembered that operations of this sort are usually performed in patients who attend late for pre-abortion consultation and who seem to be more ambivalent about abortion than the group who attend early and therefore obtain vaginal termination (55). Their distress may be due at least partly to their ambivalence. However, ignorance of what the procedure involves is also a factor (34), and the importance of educating the patient in what to expect of the procedure is emphasized by Asher (87).

Further research into the emotional impact of different abortion procedures (for example, suction termination with or without general anaesthesia, in outpatients or inpatients) would seem to be fairly straightforward, provided that the groups are comparable in other respects, i.e., matched for age, parity, social background, and gestation.

Place of abortion

Where abortion law reform has resulted in a large increase in the number of abortions being done, there are often major problems in providing hospital beds, theatre time, and staff to perform the operation (83) and, unless special facilities are provided or the existing facilities are expanded, abortion patients inevitably use facilities that would otherwise be available for other gynaecological admissions (39). Since most abortion patients are clearly not ill, nurses may have difficulty in considering them as patients and may not perceive the operation as therapeutic. Furthermore, since a pregnancy termination can be performed only within a very limited time, abortion patients have to take priority over ordinary waiting-list admissions, and this may further increase nurses' resentment of them. An additional problem for nurses (particularly theatre staff) is that they often do not know the details of the case and therefore find it difficult to sympathize with the problems of what seem to them to be healthy women (95). There have been no systematic studies of the effect of these factors on the treatment of abortion patients, but there have been many reports of hostility or of problems experienced by abortion patients. Marder (64) and Tanner et al. (96) report

on the aggressive and unsympathetic attitudes of staff towards patients. Margolis et al. (34) reported that a large proportion of their patients had had embarrassing personal encounters.

Pion et al. (97) suggested that women who had the most difficulty in coming to terms with their abortions were more likely to be dissatisfied with the services. However, it could also be postulated that their difficulty in adjusting to the abortion was exacerbated by the guilt-promoting effect of the hostility experienced.

Particularly unpleasant experiences seem to be undergone by abortion patients who are admitted to maternity wards (37, 48).

Because of the problems with staff hostility in gynaecological and obstetric wards, the setting-up of separate units for abortion patients has been advocated and carried out. Dorsey-Smith et al. (89), in New York, reserved a floor for abortion cases only, with a volunteer staff. Ingham & Simms (66), in London, report that the majority of their patients felt that abortion should be dealt with separately because so many of them had been embarrassed by other patients.

Further research in this field should include specific comparisons of the experience of patients, in the same area, and of the same type, dealt with in different sorts of unit (e.g., obstetric units, gynaecological units, and special units, with or without single rooms). Another important field for research, wherever abortion patients are to be dealt with, is the evaluation of training programmes for abortion nurses, as described by Tanner et al. (98).

Post-abortion counselling and contraception

Contraception is discussed below, together with post-abortion counselling, although it is recognized that discussion of this issue will often form part of pre-abortion evaluation. However, it has been suggested (98) that information is better assimilated after the operation than before it. Even if discussion, education, and advice take place before abortion, it seems sensible that they should be reinforced immediately after the operation and perhaps also at later follow-up.

The necessity for contraceptive counselling associated with abortion is explained by the many reports of infrequent use of contraception by women who evinced their desire not to have a child by seeking abortion (45, 99). Failure to use contraception may be due to a number of factors: (*a*) ignorance; (*b*) poverty, if contraception is expensive; (*c*) carelessness; (*d*) lack of premeditation of sexual activity; and (*e*) ambivalence about contraception or indeed about pregnancy. Pearson (100), in a pilot study of 11 single women requesting abortion, emphasized their good knowledge of contraception but failure to use it through fear, ignorance, expectation of interference with spontaneity, and their impression that they would not be welcome at family planning clinics.

Because the decision to use contraception is so complex, it should not be expected that post-abortion counselling in contraception can eliminate further unwanted pregnancy. Indeed Rovinsky (56) considered the results of pre- and post-abortion counselling to be disappointing, since 5% of his patients sought a repeat abortion very soon in spite of counselling, most of the failures to use contraception being what he considered as " motivational ", although sometimes inadequate advice had been given. Psychological testing of his " recidivists " suggested that they were more impulsive than were women seeking a first abortion, and that it may be necessary to attempt to identify a group that requires a more active approach from the doctor—e.g., immediate post-abortion insertion of an intrauterine device. Rovinsky suggests that this is acceptable to most patients. Further evidence that the group seeking repeat abortion may have special characteristics comes from Pasini & Kellerhals (57), in Geneva, who found a three-fold increase in previous psychiatric consultation in 620 women seeking repeat abortion, compared with maternity patients. It seems likely that repeated abortion-seeking will be a different phenomenon, in countries where contraception is available and widely used, from that in countries where it is not. Comparative studies, which would be of great interest, must include careful evaluation of the cost and availability of contraception and of the woman's knowledge of and attitude to it.

Sterilization

In most series of women seeking abortion, there is a large group—mainly of married women—who not only do not want to continue with the index pregnancy, but also do not wish to have any more children in the future, and therefore request or are persuaded to undergo sterilization in association with the procedure. It might seem that the few weeks in which a woman realizes that she is inadvertently pregnant are not long enough for her to consider properly the results of an irrevocable procedure such

as sterilization. However, the results of the combined operation seem to be good on the whole.

Pare & Raven (40) report that, of 67 London women sterilized at the time of abortion, 59 were entirely satisfied 1–3 years later, 6 had some reservations, and only 2 regretted it (both were women with severe psychiatric illness, whose regret may not have been entirely realistic). Thompson & Baird (101) found that, of 49 women sterilized with abortion in Aberdeen, 39 were satisfied at later interview, 6 regretted the operation, and 4 regretted the circumstances that had made the sterilization necessary. Aitken-Swan (45) reports that, of 28 married women sterilized at the time of abortion—again in Aberdeen—all but 4 were delighted 4–5 months later. However, McCance et al. (35), in detailed interviews of a larger group of patients 1–4 years later, reported mixed feelings in 10% and regret in 8%. Brody et al. (50) found that the addition of tubal ligation to the abortion operation undergone by a series of American women made no difference to their state one year later on psychological testing. Malmfors (42), in Sweden, reported that 20 women who were sterilized with abortion were all happy about it 2 years later. However, Ekblad (33), also reporting from Sweden, suggested that the outcome of abortion was worse in cases where sterilization was made a condition for the women to obtain an abortion.

Reports of regrets following sterilization in some series may suggest that the operation is being performed too frequently. However, there are also reports of further legal or illegal abortions in married women who are not sterilized—30% in the Norwegian series of Kolstad (76)—and Ekblad (33) notes that 24% of the married women in his series whose pregnancies were terminated stated at follow-up 2–5 years later that they would have preferred sterilization, which had been refused, and 28% of these women had a further pregnancy termination.

Reports and opinions on this issue are therefore divided and further research is indicated.

CONCLUSIONS AND RECOMMENDATIONS

Our review of issues, research studies, and findings fully corroborates the already widespread opinion that past research in this field has been inadequate in scope, faulty in methodology, unsystematically organized, and in general motivated and directed towards problems posed by ideological rather than scientific considerations. Consequently research into such problems has been either impossible or limited in its application. Many of the theories, concepts, and categories used to clarify issues about abortion have been so problematic that they themselves need prior clarification. And the range of disciplines used in research has been restricted because the problems were too narrowly conceived in terms of illness rather than of sociological processes and psychological states.

We do not consider it part of our task to suggest detailed research designs because, at the cross-cultural level, so much depends upon local knowledge, personnel, and opportunities. Instead we offer first some general remarks on conceptual and methodological issues.

(*a*) Future scientific understanding will not be furthered by *ad hoc* epidemiological studies of incomplete clinic or hospital populations in which the basic data for rigorous epidemiological analysis are not available or not reported.

(*b*) Future research must be based on: (i) the occurrence of naturally arising innovations or experimental situations; (ii) the application of experimental techniques designed to create situations in which specific questions can be answered; (iii) surveys specially designed and conducted to provide answers to limited and defined questions; and (iv) methodological studies designed to clarify concepts and system differences.

(*c*) The preoccupation with mental health or illness and psychiatric pathology must give way to broader studies that are either descriptive or rigorously analytical, in which the focus will be on psychological states and their description and measurement in a variety of social, marital, administrative, and clinical situations. Abortion should be seen not as a separate phenomenon but as one possible course of action, the necessity for which arises out of prior and possibly preventable events and behaviour.

(*d*) Much research in the past has been centred on whether abortion should or should not be legalized. Many of these questions were not scientifically researchable. Research needs to be broadened to concentrate on abortion services, service providers, and patients' responses.

(*e*) Since there is some tendency towards uniformity within national boundaries, international comparisons are well suited to pick up the variety of procedures and processes potentially available and to assess their implications. Cross-national research,

if carefully designed, might therefore, at this stage, be worth while.

(*f*) The nature of the problem must naturally dictate the choice of research method. Much past research has been epidemiological in nature but has totally lacked the known scientific rules for valid epidemiological enquiry. This must be rectified. Furthermore, we need far more descriptive and observational studies of the processes involved at each stage—e.g., what referral pathways women follow under different systems and how they perceive them and feel about them, and what counselling services are available.

Studies of this kind would contribute in various ways, but particularly in identifying issues of concern to patients, the study of decision-making as opposed to decisions, the reformulation of old problems in researchable terms, and the introduction of nonmedical disciplines.

Areas of needed research

Pre-referral processes. These include:

(*a*) Study of the alternative choices as seen by patients, and patients' attitudes towards them. A range of studies should be conducted on single persons (male and female) and on married or cohabiting couples, at various stages of reproductive life in societies differing in specified ways in their legal, administrative, medical, and cultural systems. Their objective would be to determine in each of these settings how pregnant (and pre-pregnant) women and their partners perceive the alternatives open to them in terms of sexual relationships, contraception and family planning, illegitimate pregnancy, adoption, abortion, and sterilization. This is based on the assumption that we must understand alternatives before we can further understand decisions.

(*b*) Influences upon patients' decisions concerning abortion. Women reach tentative or firm decisions about seeking an abortion for widely differing reasons and in different personal situations. In restrictive or semi-restrictive societies, these factors (e.g., marital status, childlessness or parity, the educational and occupational career, the relationship with the sexual partner, the influence of family and relatives, the level of economic support, and the availability of social services) may influence the decisions of medical personnel. They will also affect the patient's acceptance of, adjustment to, and degree of satisfaction derived from the decision to abort or not to abort—i.e., they set the scene for both decision and outcome. Too frequently in past research these differences in motivation and personal situations have been ignored or oversimplified.

(*c*) Factors varying with the week of gestation at referral. Patients arriving at different stages of pregnancy differ in their personal characteristics and interpersonal relationships; moreover, the week of referral affects the abortion technique and the patient's reaction to the operation. Again, we have in mind, on the one hand, studies of patients and their attitudes and reactions, and, on the other hand, the wide variety of social groups and administrative and cultural contexts.

Referral and decision

Criteria of referral at primary-care level. In restrictive and semi-restrictive systems, epidemiological ambiguity results from a lack of knowledge about (i) the characteristics of abortion-seekers compared with those of the total population of pregnant women or of women with unwanted pregnancies; (ii) the criteria for decision-making by which some patients are referred to the next stage and hence the characteristics of those deterred compared with those referred onwards; (iii) the criteria used by the ultimate decision-making individual(s) or organization. The psychological and social characteristics of abortees as a group thus reflect the individual decisions of many different doctors each using his own combination of opinions and criteria. In such circumstances it is inaccurate to talk about the typical characteristics of abortees—this is possible only in a non-restrictive system in which abortion-seekers are synonymous with abortees.

Study is consequently required, not only of patients and their motivations, but of medical personnel, their ideologies, criteria, training, and procedures, before we can accurately interpret data on patient populations.

Criteria of decision-making. In many countries the grounds for abortion, as legally stated, involve judgements on social and economic considerations that lie outside the field of medicine as a discipline and on which the doctor receives no formal education. The ideological stance of the decision-maker is therefore all-important. The only study that shows the decisions of psychiatrists and gynaecologists confronted by random samples from the same population (84) reveals extremely wide variations among

individual decision-makers. Research on this problem is complicated by ethical constraints, but is nevertheless crucial to studies of decision-making and the place of psychosocial factors in decisions.

The role of the psychiatrist. A facet of this problem deserving special attention is the role of the psychiatrist in decision-making. In the movement towards more liberalized abortion, psychiatry (though not all psychiatrists) has played a crucial role because of the breadth and lack of definition of its concept of health. Psychiatry became the Trojan Horse by which liberal abortion was introduced into societies with restrictive laws but humane ideologies. The question now arises how far psychiatrists need or should be routinely involved in abortion decisions in societies where health is no longer an overriding criterion.

Counselling and support services. We have found in the literature some discussion of the need for counselling and for supporting social services. We have unearthed very little research. Yet, except in instances where abortion is perceived as a routine alternative to contraception, the interval between knowledge of pregnancy and referral, the period of decision-making itself, the termination procedure and post-abortion readjustment are likely to be stressful or even crisis events in a woman's life. The crisis and the problems to be resolved may be even greater if the abortion request is refused. Many questions require study. In what circumstances and by whom should counselling be given? What is the effect of the common practice by which counselling is provided by the decision-maker? What counselling needs do patients perceive in various circumstances? Do counsellors need special personal qualities or training? Should counselling be confined to advice and discussion within the medical setting or should it, where appropriate, be continued outwards, as social casework, into the patient's family environment?

Related to counselling is the question of social and economic support. Variations of some magnitude exist among countries in the nature and level of support offered to unmarried mothers and their families in terms of income, accommodation, nursing facilities, and work. These may be determining factors in the decision to continue or terminate a pregnancy. Similar considerations apply to contraceptive advice, facilities, and supplies and the wider question of sex education. Evaluation of existing services in all these fields, on a cross-national basis, would assist in the planning of appropriate preventive, treatment, and rehabilitation services.

Termination

Procedures. Some of the research reported above suggests that both administrative and operative procedures can minimize or create distress in the patient. Delay may allow time for second thoughts but may also create or magnify anxiety and distress. It may also necessitate a different type of operative procedure. There are suggestions that an abortion by amnio-infusion may be especially distasteful to some women—the specific effects, however, are difficult to disentangle from the underlying causes of delay, which in some cases reflects ambivalence on the part of the patient. The place of abortion (outpatient department, maternity or gynaecology ward, abortion clinic) may itself induce particular psychological responses, partly perhaps because of the differing attitudes of health personnel and of other patients in each setting.

These considerations indicate the need for careful descriptive studies and/or controlled experiments in the administrative, clinical, and operative procedures employed. The focus should be patients' perceptions and emotions; this requires sophisticated research techniques rather than the brief impressions of the gynaecologists concerned.

Concurrent sterilization. Opinion and practice vary widely as regards the advisability of concurrent sterilization. Where the ultimate decision regarding termination does not lie with the woman, she may—rightly or wrongly—perceive the offer of abortion as being linked to her acceptance of sterilization; whether such an irreversible step should be taken under the pressure of stress is also debatable. There is some evidence that, in combined abortion/sterilization procedures, subsequent regret proceeds from sterilization as much as or more than from the termination. The evaluation of different procedures and combinations of abortion and sterilization would repay study.

The post-abortion period

Mental illness. Most research in the past has been centred on the question whether abortion prevents, mitigates, or creates mental illness. We have pointed out that several separate questions are sometimes confused:

(1) Will abortion "cure" a pre-existing mental illness?

(2) Will abortion remove existing distress?

(3) Would abortion cause mental illness?

(4) Is abortion or continued pregnancy more likely to (*a*) regenerate a pre-existing illness or (*b*) exacerbate a pre-existing or an existing mental illness?

Some of the reasons for the largely inconclusive results have been given above. We do not feel able to recommend with any conviction that any priority should be given to this type of research. We believe that research that categorizes individuals in terms of defined behavioural acts, symptomatology, measured psychological status, and self-perception is likely to be more profitable than research using the health/illness dichotomy. Even so, such studies should not be encouraged unless they conform to accepted epidemiological and evaluative methodologies. In particular, we suggest observational follow-through studies of women known to have or to have had psychiatric disturbance and/or treatment in societies in which abortion is available on request and is not a factor in the decision. Such studies should be conducted on women who abort and on those who continue the pregnancy. The intention would be to provide facts concerning the relationship of known mental illness to pregnancy, motherhood, and child-rearing, which might later have relevance for counselling.

Criteria of success. Except with the ethically unjustified strategy of randomized sampling, it will never be possible to state whether abortion was or is justifiable on the grounds of sequelae, because we can only compare actual with hypothetical sequelae. We can nevertheless compile information that narrows down the area of obscurity and permits a value judgement on a more defined set of options. For this purpose, we need factual information about the subsequent careers of women who are given or refused a termination. Outcomes should be presented in terms useful to counsellors. In practice, this means that they should be described separately for subgroups whose characteristics are identifiable and classifiable at the point of decision.

The information required needs to be descriptive and to cover immediate short-term behaviour, medical history, long-term interpersonal, marital, and family relationships, occupational career, and subsequent sexual and reproductive events. Without such information, no theories relating events to sequelae can be adequately developed because the essential categories of analysis and the processes linking cause and presumed result cannot be formulated. The need at this stage is for factual descriptive information on which theories can be built, rather than the application of existing theories of dubious relevance or validity drawn from other areas of medicine.

Refused abortion. The foregoing remarks apply as much to women whose requests for abortion are refused as to those granted an abortion. Some special features, however, distinguish the refused group—in particular, that they must adjust to the continuation of pregnancy and that a child is produced. Intensive study is required of the processes occurring after refusal and into the early years of parenthood. We do not wish merely to discover the usual crude dichotomy of " adjusted/did not adjust "; what is important are the processes of adjustment and the influences impinging on it.

We recognize that persisting resentment may damage the child, other children, and the marital relationship. We are not, however, convinced of the practical value of further long-term longitudinal studies of the " unwanted " children of women refused an abortion. The events that occur between the refusal and the late childhood or adolescence of the offspring are so complex and are mediated through such long causal chains that " proof " is virtually impossible. On the other hand, " proof " could be obtained that women with given constellations of prior characteristics differed in specific ways in the manner, speed, and completeness of their adjustment. The further link between maternal love or resentment and the child's future welfare can surely be left to general research on child development and family relations.

Repeated abortion. The literature reviewed above suggests strongly that the frequency of repeated abortion is heavily influenced by legal, historical, and social factors. Research should aim to clarify the relative role of sociocultural as opposed to psychological factors in recourse to repeated abortion. Ideally, repeated abortion should be compared with repeated illegitimate pregnancy, and also with repeated childbirth in general, because the alternative to repeated abortion may be repeated illegitimacy or combinations of careers involving abortion, illegitimacy, and legitimate pregnancy.

In this review of needed research we have not covered all possibilities but have confined ourselves

to major areas. Our general recommendations, arising from our immersion in a confusing research literature, are for simple, observational, descriptive research directed towards laying an information basis on which more ambitious theoretical work can be built later, and for the use of experimental research wherever it is practically or ethically appropriate. Methodology is all-important. Research on a cross-cultural basis would clearly be profitable because it most easily permits the comparative study of management systems and the identification of experimental situations.

RÉSUMÉ

ASPECTS PSYCHO-SOCIAUX DE L'AVORTEMENT: ANALYSE DES PROBLÈMES ET IMPÉRATIFS DE LA RECHERCHE

La littérature consacrée aux aspects psycho-sociaux de l'avortement est assez déroutante et difficile d'interprétation: étant donné la diversité des normes culturelles, religieuses ou juridiques, très inégalement observées de toute façon, la signification de l'avortement varie d'un pays à l'autre, d'une période à l'autre. Impossible par conséquent de considérer globalement cette littérature qui doit plutôt être envisagée dans son déroulement historique.

Il faut bien admettre que les femmes qui subissent un avortement thérapeutique ne représentent souvent qu'une petite partie du total des grossesses non désirées, et en matière de recherche les conclusions perdent beaucoup de leur valeur lorsqu'on n'est pas en mesure d'embrasser la totalité des cas. Les aides sociales et économiques qui permettraient d'envisager des solutions autres que la grossesse intempestive, ainsi que la façon dont ces solutions de rechange sont perçues par les femmes susceptibles de devenir enceintes, doivent faire l'objet d'une évaluation.

L'accord est loin d'être fait sur les séquelles de l'avortement pratiqué pour des motifs psychiatriques, et les auteurs tentent d'expliquer pourquoi. Il semble que les réactions émotionnelles négatives soient relativement fréquentes lorsque l'avortement est recommandé pour des raisons purement médicales, ou pour une malformation du fœtus. Dans beaucoup de sociétés, la plupart des avortements sont pratiqués pour des motifs d'ordre social, et l'on ne sait pas très bien si les femmes qui cherchent à se faire avorter pour ces motifs ont une psychologie destructrice, encore qu'il semble que celles qui interrompent une grossesse déjà avancée sont bien ainsi caractérisées. Lorsque l'avortement fait l'objet d'une évaluation rigoureuse avant et après, avec mise en observation de durée convenable, on s'aperçoit que, l'un dans l'autre, l'avantage psychologique est fréquent, le sentiment de culpabilité parfois présent, et les séquelles graves très rares.

Les difficultés inhérentes à l'étude des conséquences que peut avoir l'avortement refusé pour la femme, l'enfant et la famille sont abordées. Il semble que, si de nombreuses femmes à qui l'on refuse l'avortement s'adaptent à la situation, la moitié d'entre elles environ auraient tout de même préféré avorter, tandis qu'une forte minorité connaît de grandes souffrances morales et qu'une petite minorité est atteinte de troubles graves.

La recherche sur l'administration des services chargés des avortements fait l'objet d'un tour d'horizon. La nécessité de la consultation avant l'avortement, ainsi que la valeur des différents types de consultation, de conseillers et d'installations sont examinées.

La question de savoir si c'est à la femme enceinte ou aux responsables des services de santé de prendre la décision de l'avortement n'a pas été résolue, mais ce que l'on sait c'est que les travaux de recherche qui ne tiennent pas compte des principes implicites qui inspirent, et par conséquent influencent, l'action des responsables des services, sont de valeur assez douteuse.

La patiente est généralement moins perturbée lorsque l'avortement est pratiqué rapidement une fois la décision prise. Cependant, il serait intéressant de disposer de méthodes permettant d'identifier les femmes dont le cas, compte tenu de l'ambivalence de leur état d'esprit, justifierait un délai de réflexion supplémentaire et une consultation plus approfondie.

Le choc émotionnel que déterminent chez la femme les différentes techniques d'avortement et les différents cadres dans lesquels se déroule l'opération est assez variable, mais on ne sait pas très bien si les différences sont imputables aux caractéristiques des patientes, au comportement du personnel médical ou à la technique retenue.

La difficulté que présente l'évaluation des informations fournies en matière de contraception avant et après l'avortement fait l'objet d'une analyse. Il faut considérer le phénomène de l'avortement répété dans le contexte des possibilités de contraception et de stérilisation et de leur coût.

Encore que les résultats de la stérilisation liée à l'avortement semblent généralement bons, les regrets sont suffisamment fréquents — surtout lorsque la stérilisation

est mise comme condition à l'avortement — pour justifier en priorité de nouveaux travaux de recherche.

Les auteurs recommandent fortement que soient entrepris des travaux de recherche descriptive, reposant sur l'observation dans différentes cultures de populations féminines susceptibles de comporter des grossesses non désirées, avec comparaison des systèmes de prise en charge et évaluation de leur impact sur les intéressées. Certaines questions plus limitées pourront faire l'objet d'expériences contrôlées.

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